
PROGRAM NARRATIVE

770 WATER COMMISSION

Date: 12/13/2006

Time: 12:16:36

Program: ADMINISTRATIVE AND SUPPORT SERVICES	Reporting Level: 00-770-750-00-00-00-00000000
---	--

PROGRAM PERFORMANCE MEASURES

The Administrative and Support services will provide the overall guidance for the agency by identifying funding priorities. This division will also provide the other divisions with their technology equipment and support, accounting services, legal support, and human resource services.

It is our goal to provide the agency with the necessary tools to accomplish our goals.

PROGRAM STATISTICAL DATA

The Administrative and Support Services Division includes 11 FTEs. Salaries in this division also fund the seven appointed members of the State Water Commission. This division is responsible for the accounting, information technology (I.T.), legal, human resources, and overall administration and direction of the agency.

The Administrative and Support Services Division has a proposed budget of \$2,352,056. This is used for division salaries and travel as well as the agency's I.T. costs, supplies, insurance and other agency expenses. The Administrative and Support Services budget is 1.36% of the agency's requested budget.

EXPLANATION OF PROGRAM COSTS

The Administrative and Support Services budget has increases totaling \$108,78, not including payroll. Items greater than \$10,000 include a \$16,800 dollar increase in utilities, a \$29,935 increase in communications, a \$25,185 increase in fees and services and a \$30,000 increase in professional services. The last two items are a direct result of the State Water Commission incurring additional costs for legal proceedings.

We have requested as an optional adjustment a \$68,147 increase in our IT data processing line. This increase is necessary to complete the upgrade of our network to gigabit infrastructure for purposes of accommodating increasing demands for GIS data development, management and analysis. We have also requested a \$4,500 increase in travel.

PROGRAM GOALS AND OBJECTIVES

ADMINISTRATIVE AND SUPPORT SERVICES GOALS:

- Provide overall direction of powers described in state water laws for the State Water Commission and State Engineer.
- Provide umbrella administrative support services to the programs and projects of the agency.

ADMINISTRATIVE AND SUPPORT SERVICES OBJECTIVES:

- . Manage the agency budget, including accounting and disbursement of appropriated funds.
- . Maintain a record of agency actions concerning water management rules, policy, and financial commitments.
- . Coordinate programs operated by other divisions.
- . Supervise contracts and agreements entered into with other entities.
- . Provide support services to the other divisions, including record keeping and maintenance of correspondence files and a technical reference library.
- . Provide Information Technology for the agency.
- . Support requirements of the State Water Commission in complying with state regulations.
- . Manage the bonding requirements related to water development.
- . Participate in the following organizations: Missouri River Basin Association, Western States Water Council, International Joint Commission (IJC), Red River Task Force, International Souris River Board of Control, Yellowstone Compact Commission, National Water Resources Association, Association of State Dam Safety Officials, Association of State Floodplain Managers, National Water Education for Teachers, Western States Engineers, Garrison Diversion Conservancy District, Garrison Joint Technical Committee, Garrison International Consultative Group, Southwest Water Authority, Red River Basin Board, Pembina River Advisory Board, North Dakota Water Users Association, North Dakota Water Coalition, North Dakota Water Education Foundation, and the North Dakota Association of Water Resource Districts.

REQUEST DETAIL BY PROGRAM

770 WATER COMMISSION

Biennium: 2007-2009

Bill#: SB 2020

Date: 12/13/2006

Time: 12:16:36

Program: ADMINISTRATIVE AND SUPPORT SERVICES		Reporting Level: 00-770-750-00-00-00-00000000			
Description	Expenditures 2003-2005 Biennium	Present Budget 2005-2007	Budget Request Change	Requested Budget 2007-2009 Biennium	Optional Request 2007-2009

SPECIAL LINES

ADMINISTRATIVE AND SUPPORT SERVICES

TOTAL

1,984,884	2,180,445	226,061	2,406,506	72,647
1,984,884	2,180,445	226,061	2,406,506	72,647

SPECIAL LINES

GENERAL FUND

FEDERAL FUNDS

SPECIAL FUNDS

TOTAL

1,898,439	1,011,220	22,922	1,034,142	72,647
76,244	103,703	25,185	128,888	0
10,201	1,065,522	177,954	1,243,476	0
1,984,884	2,180,445	226,061	2,406,506	72,647

PROGRAM FUNDING SOURCES

FEDERAL FUNDS

SPECIAL FUNDS

GENERAL FUND

PROGRAM FUNDING TOTAL

76,244	103,703	25,185	128,888	0
10,201	1,065,522	177,954	1,243,476	0
1,898,439	1,011,220	22,922	1,034,142	72,647
1,984,884	2,180,445	226,061	2,406,506	72,647

FTE EMPLOYEES

11.00	11.00	.00	11.00	.00
--------------	--------------	------------	--------------	------------

FUNDING DETAIL**GENERAL FUND**

1,898,439	1,011,220	22,922	1,034,142	72,647
------------------	------------------	---------------	------------------	---------------

FEDERAL FUNDS

N006 CAP PROGRAM

N047 MR&I ADMINISTRATION

N157 STATE DAM SAFETY GRANT PROGRAM

N177 FLOOD ASSISTANCE PROGRAM FY 00

N190 WETLANDS PROTECTION PROGRAM

N192 FEMA MAP MODERNIZATION MGMT

N194 FED FUND TRANSFER FROM ANOTHER AGEN

TOTAL

22,262	31,246	1,742	32,988	0
28,778	22,100	1,105	23,205	0
8,452	11,757	5,408	17,165	0
3	9,100	1,930	11,030	0
0	0	0	0	0
320	20,000	10,000	30,000	0
16,429	9,500	5,000	14,500	0
76,244	103,703	25,185	128,888	0

SPECIAL FUNDS

267 WATER DEVELOPMENT TRUST FUND 267

397 WATER COMMISSION FUND 397

TOTAL

0	1,056,522	177,954	1,234,476	0
10,201	9,000	0	9,000	0
10,201	1,065,522	177,954	1,243,476	0

CHANGE PACKAGE DETAIL

770 WATER COMMISSION

Biennium: 2007-2009

Bill#: SB 2020

Date: 12/13/2006

Time: 12:16:36

PROGRAM: ADMINISTRATIVE AND SUPPORT SERVICES		REPORTING LEVEL: 00-770-750-00-00-00-00000000			
Description	FTE	General Fund	Federal Funds	Special Funds	Total Funds

AGENCY BUDGET CHANGES

Cost To Continue	.00	14,518	0	42,312	56,830
1 Operations	.00	8,404	25,185	81,192	114,781
7 Salary Adjustments	.00	0	0	54,450	54,450
Agency Total	.00	22,922	25,185	177,954	226,061

OPTIONAL REQUEST

5 Travel Increase	.00	4,500	0	0	4,500
6 Information Technology Increase	.00	68,147	0	0	68,147
Optional Total	.00	72,647	0	0	72,647

PROGRAM NARRATIVE

770 WATER COMMISSION

Date: 12/13/2006

Time: 12:16:36

Program: WATER AND ATMOSPHERIC RESOURCES	Reporting Level: 00-770-760-00-00-00-00000000
---	--

PROGRAM PERFORMANCE MEASURES

With the state and federal funding included in this budget request the State Water Commission will strive to achieve the following project and program efforts during the 2007-2009 biennium as a measure of performance.

Southwest Pipeline Project

- Complete a preliminary engineering report and Environmental Assessment for Oliver, Mercer, and North Dunn Regional Service Area.
- Complete construction of rural water distribution contracts for the remainder of Medora-Beach Regional Service Area (South Fryburg, Fairfield, and Trotters Pockets).
- Secure a back up generator for Richardton pump station as increased usage places greater demands on the project storage reserves.
- Complete Oliver, Mercer, North Dunn Phase 2A, including Phase 1 of Zap Water Treatment Plant, Zap Potable Water Tank, the transmission line to Zap, and a rural distribution line for 35 users.

Northwest Area Water Supply

- Contribute toward the completion of the Environment Impact Statement (spring 2008) that is addressing biota treatment options.
- Complete construction on a pipeline that will connect the community of Berthold to Minot's existing water supply.
- Complete construction of the Minot High Service Pump Station.
- Work with the court to allow construction of additional features to serve the Minot Air Force Base and a pump station north of the base to serve areas around Mohall.
- Address any additional litigation that may arise following the completion of the Environmental Impact Statement in spring 2008.

Devils Lake Emergency Outlet

- Operate and maintain the state's emergency Devils Lake outlet on an ongoing basis.

Regulatory Program

- Process all incoming construction, drainage, and sovereign land permit applications.
- Provide technical assistance to Water Resource Districts (WRDs) as requested.
- Address all incoming WRD decision appeals.
- Address all incoming drainage complaints.
- Provide 100% of flow determinations requested per NDCC 24-03-08.
- Respond to Solicitations of Views for all incoming Public Service Commission and U.S. Army Corps of Engineers' Section 404 permit applications.

Municipal, Rural, and Industrial (MR&I) Water Supply Program

- Update a five-year plan for MR&I project funding requests.
- Participate in meetings with communities and rural water districts to provide technical and planning assistance on an ongoing basis.
- Provide MR&I budget estimates for project development on an ongoing basis.
- Coordinate meetings with various funding entities to discuss projects on an ongoing basis.

Floodplain Management

- Monitor community floodplain management compliance under the Community Assistance Program (CAP).
- Provide technical assistance to communities regarding the National Flood Insurance Program (NFIP) under CAP.
- Manage the Flood Mitigation Assistance (FMA) program to develop local floodplain mitigation plans.
- Manage small-scale acquisition projects under the FMA program.
- Conduct floodplain management training workshops under CAP.
- Cooperate with FEMA to develop North Dakota's role in a flood insurance map update and modernization program.
- Conduct floodplain determinations for the Bank of North Dakota on a quarterly basis throughout the 2005-2007 biennium.

Dam Safety Program

- Conduct partial inspections of 120 dams during the spring inspection season by June, annually.
- Conduct full inspections of 17 dams in 2007 and report findings to owners.
- Conduct full inspections of 19 dams and report findings to owners by December 2008.
- Work with dam owners to develop Emergency Action Plans for four dams.
- Complete new Phase I inspection reports for two dams.
- Prioritize dam repair needs and provide priorities to dam owners.

Cost-share Program

- Review approximately 40 cost-share inquiries/applications annually for cost-share eligibility and assistance.
- Present 30-40 cost-share proposals for approval and authorization by the SWC annually.
- Develop agreements/contracts for 30-40 approved and authorized projects annually.
- Process requests for payment, monitor agreement/contract compliance, and review and inspect work, for approximately 80 active projects.

Construction

- Conduct general construction and maintenance efforts on an ongoing basis.
- Administer dam inspections and report findings to owners (see Dam Safety Program Performance Measures).
- Repair and maintain North Dakota's stream gauge network through cooperative efforts with the U.S. Geological Survey on an ongoing basis.

State Water Management Plan

- Update and review the water project inventory database and agency policies by summer 2008.
- Compile water use and other general water resource information by summer 2008.
- Review and update North Dakota's water management planning goals and objectives by fall 2008.
- Review and update water resource program inventory by Fall 2008.
- Develop text, tables, and compile funding needs for the 2009 State Water Management Plan by December 2008.

Water Education for Teachers (WET) Program

- Develop and complete Project WET service contracts with providers by January, annually.
- Maintain Project WET classroom-ready teaching aids in support of educational efforts.

- Provide in-service and pre-service credit and non-credit educational programs for 550 K-12 educators
- Provide funding and technical expertise to selected organizations to develop and complete ten water festivals involving 9,000 third, fourth, and fifth graders.
- Provide water quality education programs for 20,000 K-12 youth and adults.
- Develop and implement two Discover Today's Watershed Institutes for 60 K-12 formal and non-formal educators.
- Develop and implement two statewide water quality education poster contests involving 2,500 third graders.
- Develop and implement two Advanced Watershed Applications Workshops for 40 formal and non-formal educators and 200 high school students.
- Maintain facilitator network of 30 educators, the facilitator recognition and incentive programs, and Project WET promotional materials.

Watershed Plan Coordination Program

- Provide technical assistance to the Devils Lake and Upper Sheyenne Joint Water Resource Boards in their scheduled review and updates of their basin water management plans for 2009.
- Provide technical assistance to the Missouri River Joint Water Board in their efforts to improve water and land management in the Missouri River corridor portion of North Dakota.
- Provide technical assistance toward the implementation of the Red River Basin Commission's Natural Resource Framework Plan on an ongoing basis.
- Provide direction and technical expertise to the Red River Joint Water Resource District in their development and implementation of a regional water management plan.

North Dakota Cloud Modification Project

- Hire NDCMP field personnel by the end of May, annually.
- Conduct pre-project ground school by the end of May, annually.
- Participate in NDCMP operations during June through August, annually.
- Provide final reporting to participating counties during the winter, annually.
- Relocate Bowman ARB radar facility to new Bowman airport location to be built in the 2007-2009 biennium.

Atmospheric Resource Board – Cooperative Research Program

- Work with similar organizations on an ongoing basis, such as the North American Interstate Weather Modification Council and Weather Modification Association, to establish a long-term, federally-funded research program.
- Continue with focused research initiatives geared toward improving the operational application of cloud seeding through the North Dakota Cloud Modification Project.

Atmospheric Resource Board – Cooperative Observer Network

- Manage daily observation of rainfall and hail, including data entry, quality control, and rainfall mapping during April-September, annually.
- Complete season total mapping and volunteer renewal for following years by fall, annually.
- Recruit new volunteers for ARBCON by spring, annually.
- Mail postage-paid reporting cards and rain gauges for reporting season by March, annually.
- Expand the use of online reporting by ARBCON observers.
- Create growing season precipitation climatology products with the 30-year ARBCON data record.

Administration, Adjudication, and Evaluation of Water Rights

- Gather data on shared resources and conduct investigations.
- Guide applicants through the water permit application process; prepare Requests for the State Engineer; maintain records on individual permit applications; and maintain water use records to quantify water rights.
- Process and approve through the State Engineer, 60-100 conditional water permit applications.
- Approve 400-500 temporary water permit applications.
- Take action on 150-200 water permits involving attachments, assignments, extensions, and cancellations.

- Send out requests for annual water use reports to permit holders by November and January, annually.
- Complete annual water use data collection process by summer, annually.
- Complete a summary report on annual water use in North Dakota by fall, annually.

Community Water Supply Studies

- Provide technical assistance and develop community water supply studies as requested.

Water Resource Monitoring Program

- Install 250-350 monitoring wells (April-December) and 40-60 staff gauges (April-May).
- Measure 50,000-60,000 water levels in wells and surface water bodies.
- Collect data from 50-60 continuous water level recorders.
- Collect 3,000-4,000 samples from wells and surface water bodies.
- Analyze samples for various chemical constituents from April-January, annually.
- Repair and maintain about 3,800 measurement and sampling locations from April-December, annually.
- Coordinate USGS Cooperative Water Resource Monitoring Program from March-December, annually.

Water Resource-related Economic Development

- Produce “synopsis” reports on water supplies for interested entities as requested.
- Produce water resource interpretive reports on an ongoing basis.
- Support interest buy down for new irrigation systems through the AgPACE program.

Water Resource Data Information Dissemination

- Anticipate uses for which data would be needed, and provide insight to information seekers.
- Educate staff on use and utilization of database as improvements are implemented.
- Image and store commercial well drilling completion reports.
- Image and store county ground-water study reports, city ground-water reports, water resource investigation reports, and landfill investigation reports.

Water Resource Research Program

- Completed an investigation of low hardness, low salinity ground water in the Spiritwood aquifer near Warwick.
- Conduct an analysis of reverse water-level fluctuations during aquifer tests to evaluate aquitard hydraulic properties.
- Complete an Inkster aquifer recharge project – advanced modeling study.
- Continue research on origin of sulfate in ground water, in cooperation with UND Geology Department and University of Leeds, UK.
- Continue research on nitrate occurrence and movement in cooperation with UND Geology Department.
- Conduct soil and ground water interaction studies and the effects on water quality and water supply as needed.
- Conduct a comprehensive hydrogeologic study/report on the Kidder County aquifer complex.

PROGRAM STATISTICAL DATA

Southwest Pipeline Project

The 2005-2007 biennium construction activities included Medora-Beach Regional Service Area Phase II and the Beulah Interim Service Area projects. These two projects will have added over 400 rural users plus the cities of Beach, Sentinel Butte, Golvea, and Zap to the system. Users in Zap, around Beulah, and in Morton County will be the first Southwest Pipeline customers to purchase water that was not pumped out of Lake Sakakawea and treated in Dickinson. Zap will be served with water purchased from the City of Beulah and Morton County users will be served with water purchased from the Missouri West Water System.

In 2005, the Southwest Pipeline pumped 1,156,448,000 gallons from Lake Sakakawea, which was a decrease of 473,000 gallons from 2004. The total water delivered to the end user was 98.3% of that pumped from Lake Sakakawea.

Northwest Area Water Supply

By June 30, 2007, the main transmission pipeline between Minot and Missouri River should be completed. In addition, design work on the pipeline to Berthold, pipeline within Minot, and the High Service Pump Station should be completed.

When the entire project is completed, NAWS will provide up to 26 million gallons of Missouri River water per day to at least 63,000 citizens in northwest North Dakota. With addition rural development, NAWS could serve as many as 81,000.

Devils Lake Flood Control

The state's emergency outlet from Devils Lake to the Sheyenne River became operational in August 2005. The emergency outlet includes approximately 10 miles of open channel and 3 miles of pipeline. The outlet has been and will be operated according to the Health Department's water quality discharge permit.

Regulatory Program

During the first year of the 2005-2007 biennium, the Regulatory Section of the Water Development Division, processed 13 construction permits, 60 drain permits (29 of which were for drain tile), 10 sovereign land permits, 74 wetland restorations, 73 wetland creations (32 dams and 41 dugouts or ponds), and responded to all Solicitations of Views for the Public Service Commission and U.S. Army Corps of Engineers' Section 404 permit applications.

Municipal, Rural, and Industrial (MR&I) Water Supply Program

During the 2005-2007 biennium, MR&I program funds were provided for design and/or construction on All Seasons Water Users Systems IV and V; Langdon Rural Water Phase IV, Munich; McKenzie Rural Water; Northwest Area Water Supply; Ramsey County Rural Utilities Expansion; Tri-County Water (Grand Forks, Nelson, Ramsey); Williams Rural Water, Phase III; Park River; Stutsman Rural Water District; North Valley Water District; Walsh Rural Water; and the cities of LaMoure, Park River, Underwood, Pembina, and Williston. In addition, studies were funded in part by the MR&I program for the City of Carrington and Traill County Rural Water.

Because of North Dakota's MR&I program, regional and rural water systems have continued to expand throughout the state. As a result of this added assistance, there are now 32 regional water systems in North Dakota providing quality drinking water to 25 percent of the state's population. Over 160,000 residents are served by regional water systems, including 294 cities, 21 subdivisions, and over 100,000 rural residents. Currently, all or part of 47 of North Dakota's 53 counties, are served by regional water systems, and most have plans to expand to cover additional areas.

Floodplain Management

The floodplain management staff assisted the state's 292 NFIP communities with administration of their floodplain management responsibilities, making community visits, and conducting workshops and training activities as part of that effort.

Dam Safety Program

The Dam Safety Program inspects 66 dams of higher hazard or of special interest on a rotational basis, so that every dam on the list is fully inspected at least once every eight years. In addition, each spring, 118 dams are given a partial inspection to check on the status of the dams after the spring runoff season. Other dams in North Dakota are inspected on an "as needed" basis, such as when a dam is built, rehabilitated, or when the public has a concern about a dam.

In the first year of the 2005-2007 biennium, 23 full inspections, and 84 miscellaneous inspections or site visits were completed at dams across the state. The Dam Safety Program also conducts inspections on four highway sections in the Devils Lake area that are acting as dams, in accordance with an agreement between the Office of the State Engineer and the North Dakota Department of Transportation (DOT). The Devils Lake roads have been inspected four times in the current biennium. Dam owners have been notified of any serious problems found during the inspections. Full inspection reports for three dams have been prepared and provided to the dam owners during the current biennium. Two inspection reports for the Devils Lake Roads have been prepared and provided to the DOT.

An inventory of dam repair needs in the state was prepared. The inventory lists all of the known problems at each dam that is regularly inspected through the Dam Safety Program. The inventory includes estimated repair costs and past Water Commission contributions to each project.

Cost Share Program

The Regulatory section is responsible for administering and managing the 2005-2007 biennium cost-share program, of which \$9,231,369 is obligated, and \$4,722,957 unobligated, totaling \$13,954,326 as of June 17, 2006, per the Projects/Grants/Contract Fund. During the first year of the 2005-2007 biennium, payments in the amount of \$10,016,465 were disbursed for the development of water resources across the state. Financial assistance was provided to assist federal and state agencies and political subdivisions with eligible flood control, water supply, recreation, snagging and clearing, studies, irrigation, bank stabilization, and technical assistance projects.

Construction Section

During the 2005 construction season, the State Water Commission's construction crew installed a sand collar and low-level drawdown at Crown Butte Dam; installed siphons, culverts, field drains, an intermediate aggregate filter, and erosion protection on the Devils Lake Emergency Outlet; installed a low-level drawdown at Mount Carmel Dam; performed dam safety cofferdam work at Sweetbriar Creek Dam; took a potentially hazardous low-level system out of service at Tioga Dam; repaired a valve and leaky joint at Northgate Dam; removed the partially failed Colt Dam; and repaired and maintained several stream flow gauging stations across the state in cooperation with the U.S. Geological Survey.

During the 2006 construction season, the construction crew performed maintenance to the Devils Lake Emergency Outlet; made safety repairs and removed trees from Harvey Dam; repaired and maintained several stream flow gauging stations across the state in cooperation with the U.S. Geological Survey; and is currently repairing the Long Creek Dam near Crosby.

It is anticipated that the crew will install a new sheet pile dam at Enderlin; make spillway modifications to Wakopa Dam; fix a separated pipe at Elm River Dam #1; install an aeration baffle at Larimore Dam; modify the toe drain at Camel Hump Dam; and continue to work with the U.S. Geological Survey.

State Water Management Plan

In order to maintain a comprehensive water project/program funding needs database, the Planning and Education Division sent out biennial requests for updated project/program information to project sponsors statewide in December 2005. Requests are made to all of North Dakota's 357 incorporated cities, 61 individual water boards, and 13 joint water boards. The water project/program database, which is continually maintained, contains hundreds of records of water development efforts across the state, including their funding needs for current and future bienniums.

Water Education for Teachers

During the first year of the 2005-2007 biennium, staff had developed and completed Project WET service contracts with nine teacher centers and one Project WET facilitator; provided 12 in-service and pre-service credit and non-credit educational programs for 334 K-12 educators; provided or participated in 18 educational programs involving 7,257 K-12 students; and completed two watershed institutes (Missouri River and James and Sheyenne Rivers), involving 51 educators.

Watershed Plan Coordination

Staff is engaged in providing technical expertise and assistance toward the development of regional watershed planning efforts and studies in the Red, Missouri, and Upper Sheyenne River basins, and the Devils Lake basin. Updates of the Devils Lake Basin and Upper-Sheyenne River water management plans were completed in December 2005 and January 2006, respectively. A draft water management plan was developed in cooperation with the Red River Joint Water Resource District (RRJWRD) for their jurisdiction. That plan is under review and final consideration by the RRJWRD. In July 2005, the counties of Burleigh, Dunn, Emmons, Mercer, Morton, Mountrail, Oliver, and Sioux entered into a joint powers agreement, creating the Missouri River Joint Water Board. Planning and Education Division staff provided technical services toward the establishment of the Board, and they have, and continue to provide technical assistance toward the Board's natural resource management objectives.

North Dakota Cloud Modification Project

The most recent program evaluations show rainfall increases from 4-9% (2005), with prior evaluations up to 14% (1985), wheat yield increases of 5.9% (1992), and crop-hail damage reductions of 45% (1997). Economic impacts have been assessed by Leistriz and Sell (NDSU, 1998), and are estimated at \$24.7 million in the target areas in increased production to the state's eight most common crops alone. Thus, the benefit-to-cost ratio is at least 38:1. The urban impacts of hail damage reduction have not been formally

Atmospheric Resource Board - Cooperative Research Program

During the 2005-2007 biennium, ARB outlined research and evaluation initiatives that are still ongoing, which include cloud condensation nuclei data collection and analysis, and field testing of new hygroscopic seeding techniques and materials.

Atmospheric Resource Board - Cooperative Observer Network (ARBCON)

ARBCON has collected growing season rainfall and hail data from volunteer observers statewide since 1977. During those 30 years, participation has ranged from between 700 and 1,000 observers annually making it one of, if not the most dense precipitation observation networks in the country. The data are accessed by a wide range of users, recently assisting in delineating drought across the state. In all, more than three million daily precipitation observations and better than ten thousand hail observations have been reported.

Administration, Adjudication, and Evaluation of Water Rights

During the first year of the 2005-2007 biennium, the Appropriations Division conducted 68 inspections of completed conditional water permits and perfected 37 conditional water permits. Summary reports on annual water use in North Dakota will be completed for distribution in September 2006 and 2007.

Community Water Supply Studies

In July 2006, a Traill County Rural Water Users Phase III Ground Water Supply Study was completed. A Wahpeton Buried Valley Aquifer System Ground Water Study is currently being developed.

Water Resource Monitoring

During the first year of the 2005-2007 biennium, the Appropriations Division installed 70 monitoring wells; made 18,719 measurements of water levels in wells and surface water bodies; collected 295,855 measurements from 40 continuous water level recorders; collected 2,176 water samples from 1,383 sites (including wells and surface water bodies; analyzed water samples for various chemical constituents; and continued to coordinate with the United States Geological Survey to advance the Cooperative Water Resource Monitoring Program.

Water Resource-Related Economic Development Program

As of June 30, 2006, \$52,507 had been provided to North Dakota agricultural producers through the AgPACE program, enabling farmers to buy-down interest on new irrigation systems. The Appropriations Division also worked on various “synopsis” water supply reports and water resource interpretive reports during the 2005-2007 biennium. In addition, support was provided toward the development of a Vegetable Industry Development Plan that was completed in March 2006.

Water Resource Data Information Dissemination

During the 2005-2007 biennium, 37,782 commercial well drilling logs were imaged, and a total of 54,132 are now available on the Water Commission’s website. In addition, 100% of county ground water study reports, city ground water reports, water resource investigation reports, and landfill investigation reports were imaged and stored, and are now available via the Water Commission’s website. Also available to the public and other interested parties through the Commission’s online permit database are records pertaining to 1.5 million water-level measurements, 31,000 site locations, 50,000 water quality analyses, and 17,000 sites with litho logic descriptions.

Water Resource Research

The Appropriations Division completed a number of water resource research efforts during the first part of the 2005-2007 biennium, including a Karlsruhe aquifer nitrate assessment; a water quality assessment of North Dakota’s Camp Grafton South Unit sampling plan presentation; an Oakes infiltration data summary; a report on the use of sulfur isotopes for tracking sulfates in the Elk Valley Aquifer; a report on assessing sulfate sources in the Sheyenne River as related to the Devils Lake Outlet project; a report assessing soil salinity along the Devils Lake Outlet; and a draft report for evaluating methods for assessing salinity along the Devils Lake Outlet. Several other research efforts are also currently underway, including: an Elk Valley aquifer sulfate sources study; additional work on toward the water quality assessment of North Dakota’s Camp Grafton South Unit; a report on nitrogen isotopes as denitrification rate indicators; a fact sheet on sulfur isotopes as Elk Valley aquifer sulfate source trackers.

The Appropriations Division also provided technical assistance and guidance toward the completion of a Master’s Thesis that involved a report on nitrogen isotopes as denitrification rate indicators. And, the division conducted annual reviews of decisions for graduate water resource investigations.

EXPLANATION OF PROGRAM COSTS

The Water and Atmospheric Program has an increase of \$6,045,534 in operation. This is primarily a result of a \$5,767,479 increase in professional services. This line includes payments to consultant engineers and is showing a large increase because we have included \$3.2 million of funding that is fully reimbursed by the Federal Government for updating North Dakota's flood plain maps. Remaining increases in the professional services line are primarily attributable to continuing the Northwest Area Water Supply project. Other increases include \$122,000 in travel and \$201,000 in professional supplies. The professional supplies increase is for the chemicals needed for the weather modification project.

An increase in the projected receipts of the Resources Trust Fund has enabled the agency to increase the funding available to projects by \$40,286,726. This will enable us to construct additional water projects that have been waiting for funding.

Although the agency did shift as many dollars as we could, travel costs have increased beyond our ability to shift funding; because of this we will request an optional adjustment for travel of \$97,078.

PROGRAM GOALS AND OBJECTIVES

WATER AND ATMOSPHERIC RESOURCES GOALS:

- To regulate the use of water resources for the future welfare and prosperity of the people of North Dakota.
- To develop water resources for the future welfare and prosperity of the people of North Dakota.
- To manage water resources for the future welfare and prosperity of the people of North Dakota.
- To educate the public regarding the nature and occurrence of North Dakota's water resources.
- To collect, manage, and distribute information to facilitate improved management of North Dakota's water resources.
- To conduct research into the processes affecting the hydrologic cycle to improve the management of North Dakota's water resources.

WATER AND ATMOSPHERIC RESOURCES OBJECTIVES:

- Operate and maintain the Devils Lake outlet in an environmentally sound manner to reduce flood damages in the Devils Lake basin.
- Develop a new comprehensive North Dakota Statewide Water Management Plan by 2009.
- Review and modify North Dakota's Sovereign Land Management Plan to reflect contemporary management needs and regulations that impact sovereign lands.
- Develop, promote, deliver, and provide to K-12 formal and non-formal educators and students: indoor and outdoor water science and water education programs; balanced water resource information and education tools, services, programs and resource materials; institutes, workshops, in-service and pre-service educational opportunities; and classroom events, youth camps, youth water festivals, community water or environmental awareness, and youth service/active events.
- Provide technical expertise and assistance toward the review and implementation of regional watershed planning efforts and studies in the Red and Upper Sheyenne River basins, and the Devils Lake basin; and contribute toward the advancement of Missouri River Joint Water Board efforts.
- Finish construction of the water distribution system in the Medora-Beach service area as part of the Southwest Pipeline Project (SWPP).
- Begin construction on the Oliver, Mercer, North Dunn Regional Service Area as part of the SWPP.
- Contribute toward the completion of the Environmental Impact Statement that addresses biota treatment options for the NAWs project.
- Continue construction on NAWs project features that are not affected by court imposed restrictions.
- Regulate, where appropriate, the construction of dams, dikes, water control facilities, drainage works, and projects on sovereign lands, to ensure proper management of North Dakota's water resources and public safety.
- Interact with the public, continue involvement on interagency committees, and participate in training workshops, to facilitate education and information dissemination to other water resource managers - especially at the local level.

- Coordinate alternative funding solutions for water supply and water treatment projects to help water users in cities and rural water areas obtain an adequate supply of quality water for municipal, rural, and industrial (MR&I) purposes.
- Manage the state's floodplains to reduce flood damages throughout the state.
- Coordinate local, state, and federal floodplain management activities.
- Fulfill all existing responsibilities under the Federal Emergency Management Agency's (FEMA) Community Assistance Program (CAP) and Flood Mitigation Assistance (FMA) programs.
- Establish and support the state's continued role in the Map Modernization (MAPMOD) Initiative.
- Reduce hail damages in the North Dakota Cloud Modification Project (NDCMP) target area.
- Enhance summer rainfall from thunderstorms in NDCMP target area.
- On a rotational basis, conduct full inspections on 50 of North Dakota's 68 dams that require more comprehensive inspections.
- Report findings of dam inspections to dam owners so they can update and improve the safety of their dams.
- Update and educate dam owners and builders with the most current dam safety standards.
- Update and maintain an inventory of all dams in North Dakota.
- Financially assist federal and state agencies and political subdivisions with eligible flood control, water supply, recreation, snagging and clearing, studies, irrigation, bank stabilization, and technical assistance projects.
- Maintain water resource facilities within the state to ensure public safety, and enhance quality of life by providing water-based recreation opportunities.
- Work with the United States Geological Survey to maintain the network of stream gauges throughout the state, thereby ensuring reliable data necessary for managing North Dakota's water resources within the state.
- Improve operational application of cloud seeding technologies.
- Better quantify cloud seeding effects through development and application of improved evaluation techniques.
- Make high-resolution precipitation and hail data available to counties, states, federal agencies, and private organizations.
- Pursue cooperative efforts with neighboring states and provinces to plan for beneficial water management of shared water resources.
- Cooperate with agencies that also have regulatory authority over North Dakota's waters.
- Evaluate water permit applications and recommend decisions to the State Engineer.
- Maintain water right records.
- Document permitted water use.
- Conduct studies of potential water resources.
- Publish reports on water resource studies.
- Provide guidance and/or recommendations with regard to water-supply concerns.
- Identify and evaluate potential water supplies for economic development.
- Support programs to encourage industrial development.
- Support programs to encourage irrigation.
- Develop and maintain web-based integration for access to water resource data.
- Support research into water resources of the state.

REQUEST DETAIL BY PROGRAM

770 WATER COMMISSION

Biennium: 2007-2009

Bill#: SB 2020

Date: 12/13/2006

Time: 12:16:36

Program: WATER AND ATMOSPHERIC RESOURCES		Reporting Level: 00-770-760-00-00-00-00000000			
Description	Expenditures 2003-2005 Biennium	Present Budget 2005-2007	Budget Request Change	Requested Budget 2007-2009 Biennium	Optional Request 2007-2009

SPECIAL LINES

WATER AND ATMOSPHERIC RESOURCES	93,922,277	123,890,493	47,158,719	171,049,212	213,210
TOTAL	93,922,277	123,890,493	47,158,719	171,049,212	213,210

SPECIAL LINES

GENERAL FUND	7,260,152	0	0	0	97,078
FEDERAL FUNDS	13,221,379	17,578,463	9,785,276	27,363,739	0
SPECIAL FUNDS	73,440,746	106,312,030	37,373,443	143,685,473	116,132
TOTAL	93,922,277	123,890,493	47,158,719	171,049,212	213,210

PROGRAM FUNDING SOURCES

FEDERAL FUNDS	13,221,379	17,578,463	9,785,276	27,363,739	0
GENERAL FUND	7,260,152	0	0	0	97,078
SPECIAL FUNDS	73,440,746	106,312,030	37,373,443	143,685,473	116,132
PROGRAM FUNDING TOTAL	93,922,277	123,890,493	47,158,719	171,049,212	213,210

FTE EMPLOYEES	71.00	73.00	.00	73.00	1.00
----------------------	--------------	--------------	------------	--------------	-------------

FUNDING DETAIL

GENERAL FUND	7,260,152	0	0	0	97,078
---------------------	------------------	----------	----------	----------	---------------

FEDERAL FUNDS

2375 NAWS STUDY	0	0	0	0	0
N006 CAP PROGRAM	175,543	165,656	1,407	167,063	0
N013 SOUTHWEST PIPELINE	2,831,119	70,000	5,108,142	5,178,142	0
N047 MR&I ADMINISTRATION	154,506	160,048	18,464	178,512	0
N117 WET NON-POINT SOURCE PROGRAM	154,851	150,063	9,937	160,000	0
N120 2002 ND WEATHER DAMAGE MODIFICATIO	267,027	1,500,000	0	1,500,000	0
N157 STATE DAM SAFETY GRANT PROGRAM	86,596	111,716	461	112,177	0
N161 NORTHWEST AREA WATER SUPPLY (NAWS)	9,025,126	13,750,000	2,775,000	16,525,000	0
N177 FLOOD ASSISTANCE PROGRAM FY 00	48,222	250,980	62,353	313,333	0
N190 WETLANDS PROTECTION PROGRAM	265,248	75,000	-75,000	0	0
N192 FEMA MAP MODERNIZATION MGMT	47,820	1,220,000	2,009,512	3,229,512	0
N194 FED FUND TRANSFER FROM ANOTHER AGEN	165,321	125,000	-125,000	0	0
N224 FEMA COOPERATING TECHNICAL PARTN	0	0	0	0	0
TOTAL	13,221,379	17,578,463	9,785,276	27,363,739	0

REQUEST DETAIL BY PROGRAM**770 WATER COMMISSION****Biennium: 2007-2009****Bill#: SB 2020****Date: 12/13/2006****Time: 12:16:36**

Program: WATER AND ATMOSPHERIC RESOURCES		Reporting Level: 00-770-760-00-00-00-00000000			
Description	Expenditures 2003-2005 Biennium	Present Budget 2005-2007	Budget Request Change	Requested Budget 2007-2009 Biennium	Optional Request 2007-2009

SPECIAL FUNDS

267 WATER DEVELOPMENT TRUST FUND 267	4,946,342	28,970,761	7,250,754	36,221,515	116,132
397 WATER COMMISSION FUND 397	68,494,404	77,341,269	29,972,689	107,313,958	0
413 NAWS PROJECT RESERVE FUND 413	0	0	150,000	150,000	0
TOTAL	73,440,746	106,312,030	37,373,443	143,685,473	116,132

CHANGE PACKAGE DETAIL

770 WATER COMMISSION

Biennium: 2007-2009

Bill#: SB 2020

Date: 12/13/2006

Time: 12:16:36

PROGRAM: WATER AND ATMOSPHERIC RESOURCES		REPORTING LEVEL: 00-770-760-00-00-00-00000000			
Description	FTE	General Fund	Federal Funds	Special Funds	Total Funds

AGENCY BUDGET CHANGES

Cost To Continue	.00	0	-14,657,256	-29,031,395	-43,688,651
1 Operations	.00	0	3,593,522	2,452,012	6,045,534
2 Capital Assets	.00	0	20,849,000	32,654,936	53,503,936
3 Grants	.00	0	10	30,952,340	30,952,350
7 Salary Adjustments	.00	0	0	345,550	345,550
Agency Total	.00	0	9,785,276	37,373,443	47,158,719

OPTIONAL REQUEST

5 Travel Increase	.00	97,078	0	0	97,078
8 Water Appropriations FTE	1.00	0	0	116,132	116,132
Optional Total	1.00	97,078	0	116,132	213,210